

THE Royal Society of Canada has issued its Proceedings and Transactions during the year 1887. This is the fifth volume of the series. Among the papers (some of which are in French) we may note the following: the Eskimo, by Franz Boas; notes and observations on the Kwakwiool people of the northern part of Vancouver Island, and adjacent coasts, made during the summer of 1885, with a vocabulary of about seven hundred words, by George M. Dawson; on the Indians and Eskimos of the Ungava District, Labrador, by Lucien M. Turner; on a specimen of Canadian native platinum from British Columbia, by G. Christian Hoffmann; microscopic petrography of the drift of Central Ontario, by A. P. Coleman; Michel Sarrazin: matériaux pour servir à l'histoire de la science en Canada, by the Abbé Laflamme; a review of Canadian botany from the first settlement of New France to the nineteenth century, by D. P. Penhallow; illustrations of the fauna of the St. John group, by G. F. Matthew; squirrels, their habits and intelligence, with especial reference to feigning, by T. Wesley Mills.

The first volume of the "Geological Record," for 1880-84 (inclusive), has just been published. The second volume is partly in type, and will be ready by the end of the year. The editors are Mr. W. Topley and Mr. C. Davies Sherborn. Three alterations have been made in this issue of the "Record." Titles only are given; physical geology is all included under one heading, instead of three as heretofore; supplements are abolished, titles omitted from previous years appearing in the main text.

ACCORDING to the Report of the Committee of Council on Education (England and Wales) for the past year, the class subjects under the head of "Elementary Science" have practically not been taught in the elementary schools throughout the country. Only thirty-nine schools have taken up any of these subjects, while geography, for instance, has been taught in 12,035 schools. With regard to the training colleges for teachers it has of late years been arranged that success in the examinations in science held by the Science and Art Department should be reckoned in fixing the students' places in the class list of candidates for certificates as teachers of public schools. It is curious that in the training colleges in Wales—Bangor, Carmarthen, and Carnarvon—not a single student presented himself in mathematics, theoretical mechanics, animal physiology, or inorganic chemistry; and out of 713 male students who passed the examinations in science under the Science and Art Department before entering training colleges in the country only seven passed in applied mechanics, nine in organic chemistry, and six in botany. Amongst the female students who passed the Science and Art Department, animal physiology and physiography were the favourite subjects, while not one passed in applied mechanics, only one in theoretical mechanics, and three in organic chemistry.

WE have received a copy of "Rural School Education in Agriculture (Scotland)," the opening lecture delivered to an agricultural class of rural teachers in the University of Edinburgh by Prof. Robert Wallace. At the outset he gives a short history of agricultural education in the University of Edinburgh (the Chair was founded in 1790), and comments on the fact that the students attending his classes are rural schoolmasters from every county in Scotland. Last year a Government grant of £300 to the University enabled the Senate to arrange special classes for his hearers. The students, he says, are not intended to be farmers. They are to be, so to speak, literary experts on agricultural matters, who are to direct the minds of lads in rural districts into proper channels, and to stir up amongst them an intelligent curiosity as to the animal and plant life around them. A suggestion made by Prof. Wallace as to the formation of libraries for the help of the rural teachers is worthy of attention. Each of these libraries should have a cyclopædia of agriculture, and one guinea a year should be expended on each to provide some leading agricultural periodical. This is all that would be

absolutely necessary. He also advocates the changing of the text-books at present in use in agricultural classes in Scotland.

THE additions to the Zoological Society's Gardens during the past week include a Patas Monkey (*Cercopithecus patas* ♀) from West Africa, presented by Master Lewis Levy; a Drill Baboon (*Cynocephalus leucophaeus* ♀) from West Africa, presented by the Rev. G. H. Richardson; a Rhesus Monkey (*Macacus rhesus* ♀) from India, presented by Miss Jessie Bone; a Common Marmoset (*Hapale jacchus*) from Brazil, presented by Miss Maud Bryden; a Ring-tailed Coati (*Nasua rufa* ♂) from Demerara, presented by Mr. Robert Sentonally; two Grey Ichneumons (*Herpestes griseus* ♂ ♀) from India, presented respectively by Mr. A. Cresser and Miss Alice Rutherford; two West African Love Birds (*Agapornis pullaria*) from West Africa, presented by Miss Ethel Levy; a Salt-water Terrapin (*Clemmys terrapin*) from North America, presented by Mr. Nicholas Fenwick Hele; four Blue-bearded Jays (*Cyanocorax cyanopogon*) from Para, a Violaceous Night Heron (*Nycticorax violaceus*) from South America, purchased; a Laughing Kingfisher (*Dacelo gigantea*) from Australia, deposited.

OUR ASTRONOMICAL COLUMN.

THE LIGHT-CURVE OF U OPHIUCHI.—Mr. S. C. Chandler investigated the light-curve of this most interesting variable about a year ago (NATURE, vol. xxxvii. p. 36), and found evidence of a slight shortening of the period. Mr. Chandler's light-curve also showed an irregularity in the increase of light after minimum, similar to that which Schönfeld had already exhibited in the light-curves of Algol and S Cancri—a diminution, that is, in the speed of recovery almost amounting to a short halt. It is evident that it is of great importance to decide whether this irregularity is due merely to some personality of the observer, or is truly characteristic of the star's variation, for in the latter case it would be difficult to reconcile it with the view now generally held that the variability of stars of the Algol type is due to the transit of a dark satellite. Mr. Sawyer has recently published (*Gould's Astronomical Journal*, No. 177) the light-curve from his own observations, which are 527 in number, made on 57 nights, and involve 1135 comparisons. Mr. Sawyer's curve shows an irregularity similar to but slighter than that of Mr. Chandler's, but the retardation takes place sooner after the minimum, and the mean of the two curves gives an almost perfectly symmetrical curve for both decrease and recovery. It would seem likely, therefore, that for this star at least this curious irregularity is a purely subjective one, and the regularity of the mean curve would seem to afford confirmation to the satellite theory.

COMETS BROOKS AND FAYE.—The following ephemerides are in continuation of those given in NATURE, vol. xxxviii. p. 503, and p. 528:—

1888.	Comet 1888 c (Brooks).				Comet 1888 d (Faye).			
	R.A.			Decl.	R.A.			Decl.
	h.	m.	s.	°	h.	m.	s.	°
Oct. 15 ...	16	14	43	5 57'4 N.	7	33	20	11 11' N.
17 ...	16	19	50	4 57'6	7	36	29	10 47
19 ...	16	24	49	4 0'1	7	39	32	10 23
21 ...	16	29	38	3 4'8	7	42	28	9 59
23 ...	16	34	22	2 11'9	7	45	17	9 35
25 ...	16	38	58	1 21'8	7	47	59	9 11
27 ...	16	43	28	0 32'8 N.	7	50	34	8 47 N.

COMET 1888 e (BARNARD).—Mr. W. R. Brooks discovered this comet independently on the following morning to that on which Mr. Barnard discovered it at Mount Hamilton.

Ephemeris for Berlin Midnight (continued from NATURE, vol. xxxviii. p. 528).

1888.	R.A.			Decl.	Log r.	Log Δ.	Bright- ness.
	h.	m.	s.				
Oct. 12 ...	6	23	14	6 59'5 N.	0.3523	0.2550	3.51
14 ...	6	19	19	6 39'7			
16 ...	6	14	58	6 18'6	0.3466	0.2265	4.10
18 ...	6	10	12	5 56'2			
20 ...	6	4	57	5 32'4	0.3410	0.1972	4.80
22 ...	5	59	12	5 7'1			
24 ...	5	52	55	4 40'3 N.	0.3354	0.1672	5.60

The brightness on September 2 has been taken as unity.